

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 9, 10, 12, 14-15, 31-32 and 38 are presently active in this case, Claim 9 amended by way of the present amendment.

In the outstanding Office Action, Claims 9, 10 and 15 were rejected under 35 U.S.C. §103a as being unpatentable over U.S. Patent Publication 2005/015,0866 to O'Donnell et al. in view of U.S. Patent No. 6,771,483 to Harada et al.; Claim 12 was rejected under 35 U.S.C. § 103a as being unpatentable over O'Donnell et al. and Harada et al., and further in view of U.S. Patent No. 4,357,387 to George et al.; Claim 31 and 38 were rejected under 35 U.S.C. § 103a as being unpatentable over O'Donnell et al., and Harada et al., and further in view of U.S. Patent No. 4,310,390 to Bradley et al. and U.S. Patent No. 6,120,955 to Tokutake et al.; Claim 14 was rejected under 35 U.S.C. § 103a as being unpatentable over O'Donnell et al., Harada et al., Bradley et al. and Tokutake et al., and further in view of U.S. Patent No. 5,534,356 to Mahulikar et al.; Claim 32 was rejected under 35 U.S.C. § 103a as being unpatentable over O'Donnell et al., and Harada et al., and further in view of U.S. Patent No. 5,892,278 to Horita et al.; and Claims 9, 10 and 12 were provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over Claims 5, 17-20 of U.S. Patent Application 10/773,245 in view of O'Donnell et al.

First, Applicants wish to thank Examiner Dhingra for the August 25, 2008 personal interview at which time the outstanding issues in this case were discussed. During the interview, Applicants presented amendments and arguments substantially as indicated in this response. While no agreement was reached, Examiner Dhingra indicated that amending Claim 9 to clarify that the sealing treatment is applied such that the interface between the

base material and the film is sealed, but the top surface of the film is not sealed may overcome the outstanding rejection, but further search and consideration would be required.

Turning now to the merits, in order to expedite issuance of a patent in this case, Applicants have amended Claim 9 to clarify the patentable distinctions of the present invention over the cited references. Specifically, amended Claim 9 recites an internal member of a plasma processing vessel, the internal member including a base material and a film formed on a surface of the base material. The film includes a main layer formed by thermal spraying of ceramic and a barrier coat layer formed of ceramic including an element selected from the group consisting of B, Mg, Al, Si, Ca, Cr, Y, Zr, Ta, Ce and Nd. Also recited is that the barrier coat layer is an intermediate layer formed between the main layer and the base material, and that the barrier coat layer is a thermally sprayed film and at least parts of pores inside the thermally sprayed film are sealed by a resin *provided below a surface of the film and not provided on a surface of the main layer*. Support for this feature is provide din Applicants' original specification at least at paragraphs [0046], [0062]-[0063] and [0068]. Further, paragraph [0068] of Applicants' specification explains that it is preferable to provide the seal portion within the film, but not on the surface of the film in order to avoid degradation of the seal and which can cause forming air pores in the film again.

The Office Action admits that O'Donnell et al. does not teach the claimed sealing feature, but cites Harada et al. as teaching this feature. Fig. 1 of Harada et al. discloses an electrostatic chuck member including a metallic sprayed electrode layer 4 sandwiched between sprayed insulating layers 3 and 5 of Al<sub>2</sub>O<sub>3</sub> ceramic. As discussed in the Response filed February 25, 2008, this structure provides the metallic sprayed electrode layer 4 having only one protecting layer (for example, the upper insulating layer 5) thereon, and thus Harada et al. fails to disclose *a multilayer film* formed on a target to be protected as recited in Claim 9. Further, in Harada et al. each of the layers 3 and 5 is sealed, and therefore, the surface layers

(above and below the electrode) are sealed. Harada et al. does not disclose any intermediate layer between the electrode 4 and surface layers 3, 5. Therefore, Harada et al. does not disclose that the barrier coat layer is an intermediate layer formed between the main layer and the base material. Even assuming that one can read Harada et al. to disclose an intermediate layer, Harada et al. does not disclose that the sealed resin is provided below a surface of the film and not provided on a surface of the main layer as also recited in Claim 9.

Furthermore, Applicants submit that it would not have been obvious to one of ordinary skill in the art at the time of the invention to combine the upper and the lower insulating layers of Harada et al. with the apparatus of O'Donnell. Specifically, in O'Donnell et al., the yttria containing coating and the intermediate coating are used as a protecting layer to protect the substrate. In contrast, the lower insulating layer and the upper insulating layer of Harada et al. are used as a dielectric layer of the electrostatic chuck. The objects of the yttria containing coating (main layer) and the intermediate layer (barrier coat layer) of the O'Donnell et al. are totally different from those of the lower and the upper insulating layers of Harada et al., and one would not combine these references to arrive at the claimed invention.

Finally, Applicants note that the secondary references to George et al., Bradley et al., Tokutake et al., Mahulikar et al. and Horita et al. are cited for teachings in dependent claims and do not correct the deficiencies of the primary references distinguished above.

For the reasons discussed above, Claim 9 patentably defines over the cited reference. As Claims 10, 12, 14, 15, 31, 32 and 38, directly or indirectly depend from claim 9, these claims also patentably define over the cited references for the reasons discussed above. In this regard, Applicants note that dependent Claims 14, 31 and 38 are rejected in the Office Action as being unpatentable over the combination of O'Donnell et al., Harada et al., Bradley et al., Tokutake et al. and Mahulikar et al. While the number of references used in a rejection is not

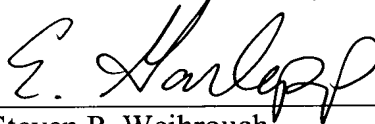
strictly limited, Applicants submit that the fact that five references are required to be combined to meet the claim limitations itself strongly suggests the non-obviousness of these dependant claims.

Finally, with respect to the *provisional* rejection of Claims 9, 10 and 12 for obviousness double patenting over Claims 5, 17-20 of co-pending Application No. 10/773,245 (US PG Pub. No. 2005/0103275), Applicants submit that the amendments to Claim 9 overcome the double patenting rejection for reasons similar to the above discussion. Alternatively, Applicants wish to address this rejection at such time as one of the co-pending applications issues as a patent and the rejection becomes non-provisional.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application and the present application is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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